NYSTAGMUS SPECTACLES - DR. FRENZEL

• 31204 NYSTAGMUS SPECTACLES - DR. FRENZEL
Easy to use in the search of spontaneous or provoked nystagmus. Fixed, biconvex lens + 18.0 diopters.
Nystagmus spectacles should be connected only with < 4.2V transformer as from safety norms 93/42/EEC, see "GIMA6" at page 128. Made in Germany.

• 31206 BATTERY NYSTAGMUS SPECTACLES
This model allows wireless working and is not bound to power supply. The Nystagmus Spectacle is provided with power through the adjustable battery placed above the spectacle and requires three 1.5 Volt batteries, size C LR14/AM-2 (baby cells). Illumination can be adjusted through a turn of the switch.

• 31130 AC/DC TRANSFORMER - see at page128.

• 31208 NYSTAGMUS LAMP - spare
4 Volt 0.230 Ampere, 1 Watt threading diam. 3.5 x 0.35 mm

TRANSFORMER NOT REQUIRED

VIDEONYSTAGMOSCOPE SYSTEM

• 31210 VIDEO-NYSTAGMOSCOPE SYSTEM - Spectacles and 1 camera
It facilitates to view and register the Nystagmus, reached through standard vestibular tests (both position and instrumental proof). This system allows to view on the monitor images of patient eyes during tests and also allows to make Visual Suppression Test (VST) through one red led ignition inside the mask to allow fixation. This useful and practical diagnostic system, thanks to its small dimension and reduced weight becomes fundamental for vestibular practise. Innovative technology used in the system allows to get images of quality that make the professional activity easy.
Power 220V (12V DC).

• 31211 ADDITIONAL CAMERA for 31210 To see both eyes on monitor at same time.

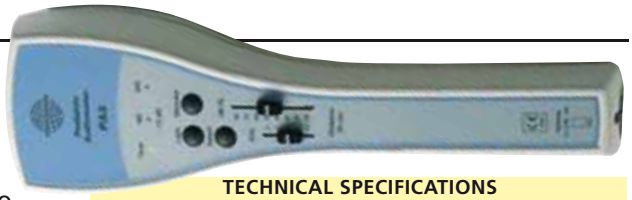
• 31212 MONITOR for 31210 - black/white 14" monitor - 1000 TV linees - 220 V

31210+31211+31212

PORTABLE AUDIOMETER

• 33601 PA5 AUDIOMETER

• 33602 TDH39 AUDIOMETRIC HEAD PHONE
The pediatric audiometer PA5 is a free field audiometer for testing children's hearing. With children old enough to cooperate, it is possible to connect a single TDH39 head phone to the PA5 and obtain audiometric thresholds. With a headhpone attached, the PA5 automatically adjusts to the correct calibration for the TDH39. Main features:
- Warble tones and narrow band noise
- White noise for easy detection
- Triangle light simulation
- COR, APR, and VRA test
- Silent presentation button
- Automatic battery switch and indicator



TECHNICAL SPECIFICATIONS

Frequencies:	500, 1000, 2000, 3000, 4000 Hz.	
Stimuli:	Warble tone, NB and WN	
Intensities:	Distance 50 cm:	20/30-80dB HL in 10dB steps, for Warble Tone and WN. 10/20–70dB for NB
	Distance 16 cm:	increases intensity by 10 dB.
Weight:	360 g	
Dimensions:	LxWxH: 25x7x5cm	
Power supply:	3AA batteries (included)	

OTOREAD™ - PORTABLE OAE WITH PRINTER

• 33607 OTOREAD SCREENER TE

• 33608 OTOREAD COMBO DP+TE

DPOAE AND TEOAE

The OtoRead™ is a fast, automatic handheld OAE instrument for testing newborn babies, children and adults. A fast and quiet thermal printer is included with the OtoRead™. A simple interface from the cradle to the printer will transfer all of the test data within seconds.

Probe cables 30 cm

100-240 V, 50-60 Hz power supply

16 languages manual: GB, DE, F, S, GR, I, P, DK, FI, E; PL, EE, N, RO, LT, NL,

Full printout of both ears in 7 seconds

Weight: 300 g

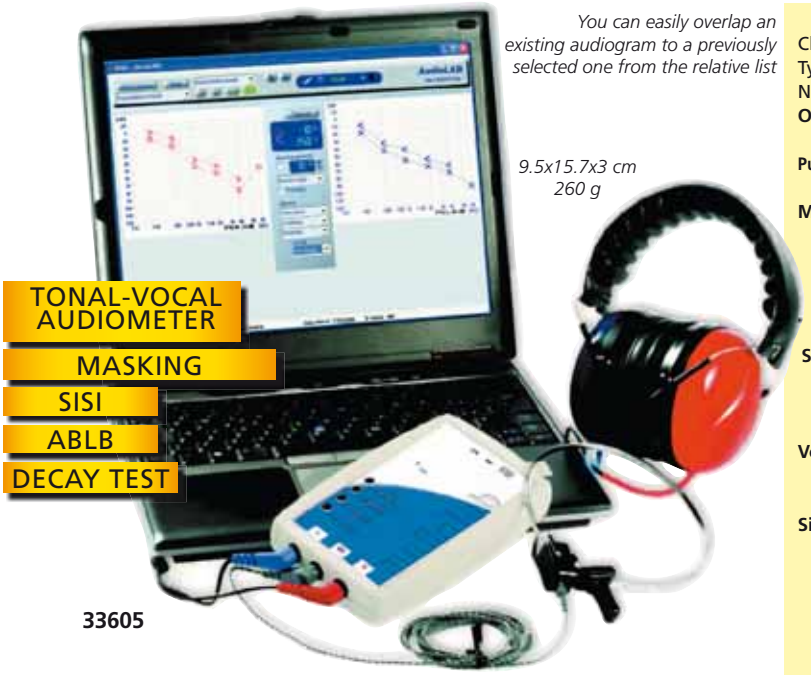
TECHNICAL SPECIFICATIONS

Measurement type	OtoAcoustic Emissions.
Frequency range DPOAE	1.5, 2, 2.5, 3, 3.5, 4, 5, 6, 8, 10, 12 kHz.
Frequency range TEOAE	0.7, 1, 1.4, 1.5, 2, 2.5, 2.8, 3.5, 4 kHz.
Stimulus intensity	40 to 70 dB SPL (DPOAE). 83 dB SPL (TEOAE).
Maximum output (Protection)	90 dB SPL. (This level is well within OSHA permissible limits of 90 dBA for 8 hours).
Microphone system noise	-20 dB SPL @ 2 kHz (1 Hz bandwidth). -13 dB SPL @ 1 kHz (1 Hz bandwidth).
Battery life	Approximately 300 tests.
Display	LCD-display 4 line x 10 character.
Weight	300 g/ 10.6 oz. including batteries.
Internal software languages	English, German, French, Spanish, Russian.

	TE	
Screener (1 fixed protocol)	6 bands 1.5-4 kHz	
	DP+TE	
Combo (2 fixed +2 customizable protocols for DP and TE - a total of 4 protocols)	6 bands 1.5-12 kHz	6 bands 700-4 kHz

STANDARD ACCESSORIES
Handheld unit (OtoRead™) including probe cord and Cradle
Printer including power supply and power cable, Printer Cable, Carrying Bag, Probe cord for extension (100 cm/39 inches), 2 Thermal printer paper rolls
Box of 146 eartips (10 sizes; 3, 4, 6, 7, 8, 9, 10, 11, 12, 13 mm), 4 probe tips
4 AA/UW3/R6 Alkaline Batteries, Operation / CE manual

CLINICAL DIGITAL 2 CHANNELS PC AUDIOMETER



You can easily overlap an existing audiogram to a previously selected one from the relative list

9.5x15.7x3 cm
260 g

33605

• 33605 AUDIOLAB AUDIOMETER
All the technologies of a digital 2 channels clinical audiometer in only 250 g. You can perform audiometry test directly on your PC display, save on your database and print when necessary. PC not included. Made in Italy.

• 33604 AUDIOLAB "ML" AUDIOMETER
Same as code 33605 but without SISI, ABLB BEKESY and DECAY and VOCAL TEST functions. This device is addressed to occupational doctors and general practitioners.

TECHNICAL SPECIFICATIONS

Clinical audiometer two channels (EN 60645-1)
Type 1 A-E (EN 60645-1 - EN 60645-2) - Type 2 A-E (ANSI S 3.6)
Number of channels: 2, identical and indipendent
Output AC R - AC L - AC R+L - BC R-L - FF R - FF L - FF R+L
Masking contralateral with AC, BC, FF
Pure tone freq. AC: 125 - 8.000 Hz, BC: 250 - 8.000 Hz, FF: 125 - 8.000 Hz
Intensity range (1.000 Hz) - 10 + 120 dB HI

Maximum output level

PURE TONE 1,000 Hz				
Transducer	TDH49	ER3A	B71	FF
Db HL	120	115	75	100
NBM	95	95	-	95

Speech Audiometry

Transducer	TDH49	ER3A	B71	FF
Db HL	100	100	-	100
NBM	95	95	-	95

Vocal material • List of the words installed into internal flash memory
• CH1 - CH2 independent inputs, CD1, CD2 two separate VU-Meters,masking noise SM and WM.
Signal mode • Normal ON - Normal OFF
• Continuos - pulsed
• Warble - frequency modulated ± 5% rate 5 Hz
• ABLB, SISI with increment 1-2-3-4-5 dB, DECAY TEST, BEKESY (only 33605)
• PAT RESPONSE
• TALK - BACK
• TALK - FORWARD
• Digital output for control Peep-Show
Accuracy • Resolution 16 Bit • Distorsion < 1%
• Precision ± 50 ppm • Ratio signal/noise > 100dB
• Stability ± 100 ppm • Power supply: USB port
PC system requirements Microsoft Windows XP, Vista Made in Italy

STANDARD ACCESSORIES

Head phone TDH 49
Radio EAR B.71 bone vibrator
Pat response
USB cable
CD with software
Operating manual

HANDHELD IMPEDANCE AUDIOMETER/TYMPANOMETER

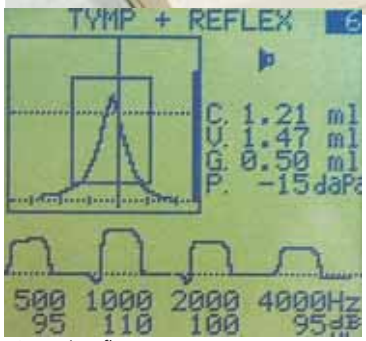
• 33645 MT10 IMPEDANCE AUDIOMETER
• 33646 MTP10 IMPEDANCE AUDIOMETER - with printer
• 33647 PAPER ROLL - 80 mm thermal paper
• 33648 SPARE EARTIPS Ø 6/7/15/18 mm - piece
• 33672 EARTIPS Ø 9mm - box of 100
• 33673 EARTIPS Ø 10mm - box of 100
• 33674 EARTIPS Ø 11mm - box of 100
• 33675 EARTIPS Ø 13mm - box of 100
MT10 is an automatic, portable impedance audiometer for both screening and clinical applications
Main features:
- automatic Tympanometry test
- pass/fail limits on screen
- 4 acoustic reflex tests per ear
- actual reflex response is recorded
- reflexes tested at correct pressure
- automatic reflex search
- audiometric screening
- memory for 20 patients
- calculates gradient
- many printing options
- rechargeable batteries
- large high resolution display

TECHNICAL SPECIFICATIONS

Tests	
- Tympanometry	Normal:+200 to -300daPa Extended: +300 to -600daPa
- Acoustic Reflex Test	4 reflexes per ear Automatic Intensity Search or Fixed Stimulus Intensity Intensities: up to 110 dBHL (l00 dBHL at 3-4 kHz) Frequencies: 0.5 kHz, 1 kHz, 2 kHz, 3 kHz, 4 kHz. Actual reflex recorded and displayed
- ScreeningAudiometry	Intensity: 10 dBHL to 50 dBHL Frequency: 0.5 kHz, 1 kHz, 2 kHz, 3 kHz, 4 kHz.
Probe Tone	Frequency: 226 Hz ± 3% Amplitude: 85 dB SPL ± 3 dB
Pressure	Direction of Sweep: positive to negative Pump Speed: 250 - 350 daPa/sec. Resetting Time: 0 Seconds. Pressure Accuracy: +/- 10% or 10daPa
Internal Memory	Tympanometry, 4 reflex recordings and Audiogram for Left as well as Right ear. 20 patients' full testing scheme. Selective patient storing.
Power supply	3 High quality rechargeable NiMH batteries included.
Weight and Dimensions	MT 10 Weight: 500 g MT 10 Dimensions: 10x25x13 cm

16 languages manual: GB, DE, FR, SE, GR, IT, PT, DK, FI, ES; PL, EE, N, RO, LT, NL, HU, NO, IS

33646



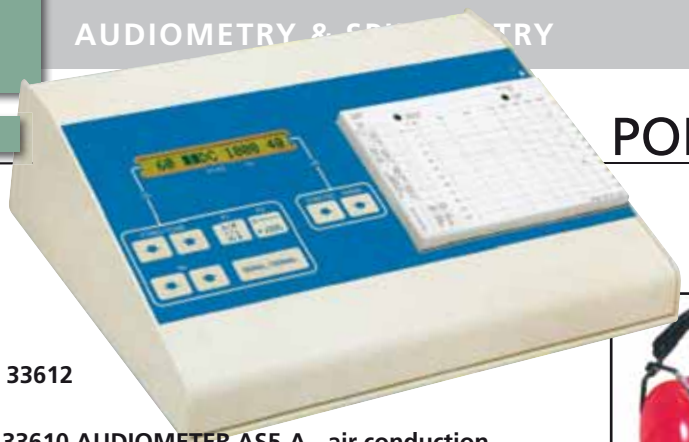
Acoustic reflex test

33645

STANDARD ACCESSORIES

Base station with built-in thermal printer, charging and "interface to PC (only code 33646)
3 rolls of thermal paper
power supply
3 NiMH rechargeable batteries
set of eartips
multilanguage operation manual (in 16 languages)
service manual

PORTABLE AUDIOMETERS



33612

CE 0318

33621

- **33610 AUDIOMETER AS5-A - air conduction**
- **33612 AUDIOMETER AS5-AOM - air+bone+masking**
- **33620 TEST RESULTS PAD**
- **33621 INSULATION DEVICE for air conduction phone (insulation 3-4 db)**
- **33622 AIR CONDUCTION PHONE TDH39 - spare**
- **27139 CARRYING BAG - nylon**

Gima audiometers have a microprocessor allowing simple and quick measure audition levels. All the operations can be made by a membrane keyboard and visualized on an alphanumeric LCD display of 16 characters.

FREQUENCY AND SOUND PRESSURE LEVELS

Frequency	250	500	1000	2000	3000	4000	6000	8000	Hz
Max. pure tone ac	90	105	105	105	105	105	90	80	dB HL
Max. pure tone bc	40	50	50	50	50	50	-	-	dB HL
Min. pure tone ac/bc	-10	-10	-10	-10	-10	-10	-10	-10	dB HL
Level increments	5	5	5	5	5	5	5	5	dB HL
Frequency accuracy	±3% at all frequencies								
Levels accuracy	±3 dB								
	ISO 389, UNE 74-020-78								

AUDIOMETERS FEATURES

	33610 AS5-A	33612 AS5-AOM
Air conduction	•	•
TDH39 phones	•	•
Continuous tone	•	•
Pulse tone	•	•
Signal indicator	•	•
Masking noise		•
Bone conduction		•
Bone vibrator		•
Patient response	•	•
LCD display	•	•

TECHNICAL SPECIFICATIONS

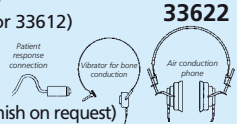
Channels: one
Masking noise (33612 only): White noise
Level range = 30 to 80 dB SPL
Levels increments = 5 dB
Power supply: 220 V 50/60 Hz, 15 W
Dimensions: 342x246x95 mm Weight: 2,5 Kg
Norm: UNE 20-613, IEC 601.1 Made in Europe

STANDARD ACCESSORIES

1. Air conduction phones TDH-39
1. Bone conduction phone (only for 33612)
1. Patient response switch
1. Test results pad (100 sheet)
1. Pen (red, blue)

User manual (English and Italian, Spanish on request)

33622



CLINICAL 2 CHANNEL AUDIOMETER

Dimension: 390x260x105 mm
Weight: 2.4 kg without accessories

LCD alphanumeric backlight 2x16

CE 0318

Programme to personalise the audiometer according to the needs of the user

- **33623 SIBELSOUND 400-A AUDIOMETER - air conduction**
- **33624 SIBELSOUND 400-AOM AUDIOMETER - air + bone + masking**
- **33626 SIBELSOUND 400-SUPRA AUDIOMETER - air + bone + mask + suprathreshold tests + software**
- **33628 INTERCOM KIT (headphone + microphone)**
- **33621 INSULATION DEVICE for air conduction phone**
- **33629 AUDIOMETRY SOFTWARE W50**

The SIBELSOUND 400 is a two-channel digital audiometer based on DSP processing. This audiometer is designed for quick and easy audiometric exploration of hearing thresholds and screening tests, such as suprathreshold pure tone tests (FOWLER-ABLB, TONE DECAY, WEBER, LOSCHER, ...).

- **Air conduction** (TDH 39): 125 - 8,000 Hz or HF: 8,000 - 20,000 Hz with optional HDA 200
- **Levels:** AC (-10 to 120 dB HL) / BC (-10 to 70 dB HL) / speech (-10 to100 dB HL) free field (-10 to 80 dB HL)
- **Masking levels** (manual or synchronized): NBN AC (-10 to 100 dB HL) NBN BC (-10 to 70 dB HL) white & speech (-10 to 100 dB SPL)
- **Tone:** continous, pulse, anternate, amplitude modulation.
- **Level increases:** 5 (A-AOM), 1 or 5 (SUPRA)
- **Frequency precision**: ±1%/ level precision ±2% db SPL
- **Automatic calculation of hearing loss and diagnosis** (COUNCIL, IM, SS MEXICO, ELI, SAL, KLOCKHOFF, MOH, OTHERS ...)
- Direct USB **connection to PC to W50 audiometry software** for viewing, storage, transmission, analysis and introduction of audiometric tests in a Microsoft Windows® environment.

FREQUENCIES AND LEVELS

STANDARD FREQUENCY	125	250	500	750	1,000	1,500	2,000	3,000	4,000	6,000	8,000	HZ
MUSICAL FREQUENCY	131	262	523	–	1,047	–	2,093	–	4,186	–	8,372	HZ
Air conduction (THD 39)	80	100	120	120	120	120	120	120	120	110	110	dB HL
Bone conduction (B 71)	–	50	60	60	70	70	70	70	70	–	–	dB HL
Free field	–	70	80	80	80	80	80	80	80	80	–	dB HL
MASKING NOISE												
Narrow bandwidth AC	60	80	100	100	100	100	100	100	100	100	90	dB HL
Narrow bandwidth BC	–	50	60	60	70	70	70	70	70	–	–	dB HL
White AC						100						dB SPL
Speech						100						dB SPL
LOGO-AUDIOMETRY												
Air conduction	100											dB SPL
Free field	80 dB at 1m from the patient											dB SPL
HIGH FREQUENCY	8000	9000	10,000	11,200	12,500	14,000	16,000	18,000	20,000			Hz
Air conduction (HDA 200)	90	90	90	90	50	50	50	50	50			dB HL
Minimum levels												
All options	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	dB HL
HIGH FREQUENCY	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	dB HL

Communication system:
- Print directly to a USB printer
With W50 audiometry software:
Transfer information from the unit's internal database to a PC
- Communicate with a PC in real time
Export patient tests to other management systems (EMR)
Update the unit's internal firmware

SIBELSOUND 400 FEATURES

	A	AOM	SUPRA
Air conduction TDH 39	•	•	•
Bone conduction B71		•	•
Masking by narrow band noise & white noise		•	•
Sisi test			•
Supraliminar tests			•
Speechaudiometry + Intercom module			•
Musical frequencies			•
Data base 1000 tests		•	•
W50 audiometry software			•
User manual English, Italian (available on request French or Spanish)	•	•	•

CLINICAL 2 CHANNEL AUDIOMETER

CE 0318

• 33630 AC 50 PROFESSIONAL AUDIOMETER air + bone conduction
Permits speech audiometry, hearing loss calculations and all types of audiometric tests, both screening and liminar-supraliminar, including diagnostic tests like: PURE TONE, SISI, VOCAL DISCRIMINATION, ABLB, LÜSCHER, WARBLE, STENGER and others. It can be connected to a printer which will produce the audiogram and hearing-loss assessment and to a PC, through an RS-232 C channel, to store and manipulate audiometric tests. AC50 comes complete with air and bone cuffs, patient response with switch, intercom kit (33633) and user manual.

• 33633 INTERCOM KIT (headphone+microphone) - spare
• 33631 SOFTWARE

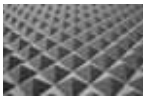
TECHNICAL SPECIFICATIONS

Channels: two
Transducers: THD 39, B-71 or B-72
Tone presentation: Continuous - Pulse - Frequency Modulation - Amplitude Modulation - ABLB - SISI
Tone switching: Normal-Inverted tone switch - With key without noises
Standards: • Safety: IEC 601.1, EN 60601.1
• Audiometry: IEC 645.1, IEC 645.2 UNE20-641
• Calibration: ISO 389, ISO 7566, UNE 74-020
Outputs: Channel RS232 C - For HP - PCL or IBM Graphics printer
Internal Memory: Capable of storing 50 patients
Power supply: 220V 50/60 Hz (other options)
Size: 470x250x95 mm
Weight: 4.5 Kg

FREQUENCY	125	250	500	750	1000	1500	2000	3000	4000	6000	8000	Hz
MAX LEVELS												
Pure tone Air Conduction	80	100	120	120	120	120	120	120	120	110	100	dB HL
Pure tone Bone Conduction	-	50	60	60	70	70	70	70	70	-	-	dB HL
Free field	-	70	90	90	90	90	90	90	90	80	-	dB HL
MASKING NOISE												
Narrow-band noise AC	60	80	100	100	100	100	100	100	100	100	90	dB HL
Narrow-band noise BC	-	40	50	50	60	60	60	60	60	-	-	dB HL
Speech noise AC						100						dB HL
Speech noise BC						70						dB HL
SPEECHAUDIOMETRY												
Air Conduction						100						dB HL
Free field						70						dB HL
Min. levels	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	dB HL
Levels increments	5	5	5	5	5	5	5	5	5	5	5	dB HL
Frequency accuracy	2% at all frequency											
Levels accuracy	±2 dB											

AUDIOMETRIC BOOTHS

28 dB



Internal poliuretan

33650 + 33651

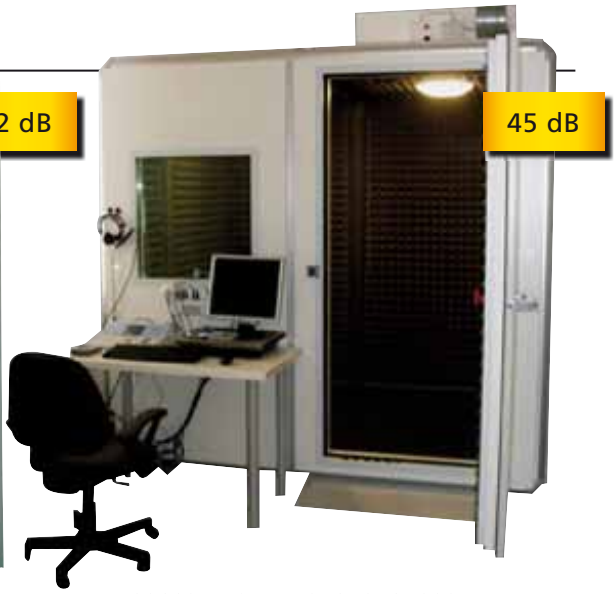
• 33650 PRO 25 - 91X91X193 cm
• 33651 TABLE 79X50 cm
Portable, compact, model, easy to install in few minutes without screws.
Made in plastic laminate, with internal autoextinguishing, polyurethane, insulating panels.
Module for cable connection.

ACOUSTIC INSULATION

Hertz		125	250	500	1000	2000	4000
PRO 25	dB	18,0	16,0	26,7	30,8	28,8	30,9
PRO 30	dB	23,4	24,1	27,8	34,5	31,3	36,4
PRO 45	dB	20,0	33,5	36,3	42,5	42,1	50,4

32 dB

• 33654 PRO 30 - 106X106X218 cm
• 33655 PRO 30 - 209X106X218 cm
• 33656 PRO 30 - 209X209X218 cm
• 33657 PRO 30 - size on request available any size from 1x1 to 3x3
• 33651 TABLE 79X50 cm
Range with different sizes, with high noise reduction and internal ventilation system. Made in aluminium and laminate with internal fire-proof, polieuretan insulating panels.
Available with 60 or 90 cm doors.
Module for cable connection.
Made in italy.



45 dB

• 33660 PRO 45 - 216X216X220 cm
• 33661 PRO 45 - 318x216x220 cm
• 33662 PRO 45 - size on request available any size from 1x1 to 6x6
• 33651 TABLE 79X50 cm
• 33652 RAMPS couple for disabled people
Top of the range, with vast selection of sizes, up to 6x6 m, with excellent noise reduction (-45 dB) and internal ventilation system. Made in aluminium and laminate with fire-proof polyurethane insulating panels. Available with large door 90 cm and module for cable connection. Made in italy

TECHNICAL SPECIFICATIONS

	33650	33654	33655	33656	33660	33661
External size (cm):	91x91x193h	106x106x218h	209x106x218h	209x209x218h	216x216x220h	318x216x220h
Internal size (cm):	85x85x186h	94x94x202h	197x94x202h	197x197x202h	195x195x200h	297x195x200h
Door size cm:	55x168h	60x200h	90x200h	90x200h	85x186h	85x186h
opening:	Left/Right	Right*			Right*	
Windows size cm:	58,5x58,5	58,5x58,5			42,5x62,5	
material:	2 - crystal insulating safety glass				4 - crystal insulating safety glass	
Wall thickness cm:	5	7,5	7,5	7,5	11.6	11.6
Weight (kg):	150	230	364	540	850	1117
Ventilation:	no	yes	yes	yes	yes	yes
Tested noise reduction dB:	28	32	32	32	45	45
Internal illumination power V:	220	220	220	220	220	220
Norms:	Class Medical Devices European Directive 93/42 CEE					

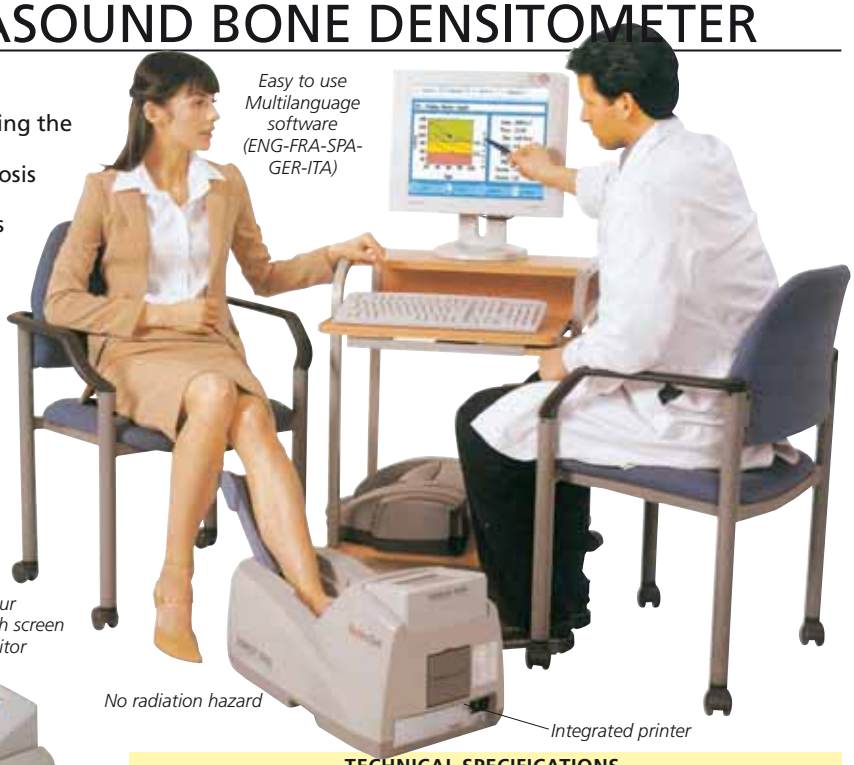
*Left opening available on request

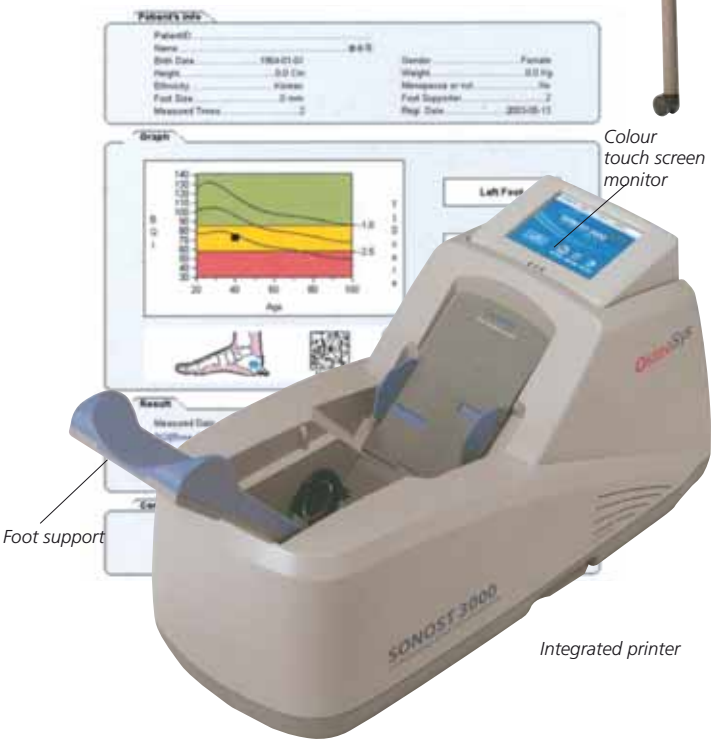
Cable connection module

STANDARD ACCESSORIES
- Module for silent audiometer cable connection
- Internal illumination
- Ventilation system (PRO 30, PRO 45 only)
- Wooden box for transport
- Manual: English, Italian

SONOST 3000 - ULTRASOUND BONE DENSITOMETER

• 33996 SONOST - 3000 with software
Waterless Ultrasound Bone Densitometer (BMD).
Sonost 3000 is a portable, economic solution for evaluating the risk of osteoporotic fracture.
Its high accuracy assists in the first diagnosis of osteoporosis monitoring bone changes.
It provides fast, convenient and easy-to-use informations on bone quality and fracture risk.
Main features:
- Superior precision
- Full dry and stand alone system
- Fast measurement (only 15 seconds)
- Auto positioning probe
- Permanent coupling pad
- Over 10,000 memories





TECHNICAL SPECIFICATIONS

Measurement site:	Calcaneus (Heel bone)
Scan Time:	15 seconds
Measurement:	Estimated heel BMD and Bone Quality Index (BQI) Obtained from measured Broad band Ultrasound Attenuation (BUA) and Speed of Sound (SOS)
Estimated Index:	SOS (C.V.%) BUA (C.V.%) BQI (C.V.%)
In Vivo:	0.2 1.5 1.5
Transducer:	25 mm - 100 mm
Separation range:	Automatic adjustment
Storage capacity:	10,000 patient information
Coupling method:	coupling gel (water not used)
Display:	6.4 inch TFT LCD (65536 colour)
User Interface:	Touch screen USB for connection to mouse or keyboard
Printer:	Thermal Printer
Operating voltage:	AC 100W~240W - 50/60Hz - 130W
Dimension:	30x62x39 cm
Weight:	12 Kg

DOCTOR'S OFFICE TOOLS - PROMOTIONAL GADGETS

• 50000 OPTICAL MINI MOUSE
Ergonomic compact mouse with USB interface, 30% smaller than traditional mouses, ideal for use with portable PC.

• 50010 OPTICAL MOUSE
• 50020 WIRELESS MOUSE
Ergonomic reliable optical mouse with USB interface available with standard cable or wireless. Compatible with Win 95, 98, 2000, XP, NT.

• 50030 MOUSE PAD USB
Large mouse pad with integrated USB 1-1 HUB with 4 USB sockets, to connect more devices to PC at the same time (mouse, printers, cameras...). Directly fits into PC by a 150 mm cable. Compatible with Win 95, 98, 2000, ME, XP, NT. Size 28x23x6 cm.

Size: 6.4x2x0.8 cm

• 50050 USB MEMORY - 512 MB
• 50051 USB MEMORY - 1 GB
USB external memory flash drive. Compatible with Win ,Mac OS, Linux. Supplied with installation CD-Rom, 1 m USB cable and neck strap. Material: plastic and aluminium.

• 50150 MP3 PLAYER - 1 GB
MP3 and WMA files player with radio. USB 2.0 connection.
96x26 dot matrix display with blue back-light, icon interface, multi-language OSD. Easy download by 'drag & drop'. Song title will be displayed (patented MPEG system) with 5 standard equalizer set up (Normal, Rock, Jazz, Classic, Pop).
More than 10 hours no-stop music.
Battery: 1 x AAA included

• 50080 INTERNET USB PHONE
It makes possible to have telephone calls using Internet connection (Voip). Compatible with Skype, SJ-Phone, X-Lite, MSN, Net2Phone softwares. Inner sound card 16 Bit.
Plug & Play, charged by USB connection to PC.
Battery: included.
Size: 12x4.8x3 cm

• 50300 4 in 1 LASER POINTER PEN
Multifunction metal pen with laser pointer, black ballpoint pen and plastic PDA stylus. Supplied with 3 extra button cell batteries and additional ink refill.
Packing: Metal gift box.
Battery: included

PEAK FLOW METERS: DIGITAL AND MECHANICAL

- **33434 PIKO-1 - digital peak flow meter**
- **33444 PIKO-6 - digital peak flow meter**
- **33436 PC DOWNLOAD DEVICE + software**
- **33437 MOUTHPIECES - box of 10 pcs**

PiKo-1™ is the world's first pocket sized electronic peak flow and **FEV_1** meter.
The new PIKO-6™ in addition to FEV_1, measures **FEV_6 and FEV_1/ FEV_6**. Sophisticated features include automatic test quality alerts and electronic data storage of 96 tests. Data can be reviewed via a single operating button, eliminating the errors associated with paper diaries. Prices compare to mechanical peak flow meters.
PiKoNET software. All tests can be easily downloaded for tracking and trending. Results can be saved in pdf format.

TECHNICAL SPECIFICATION

PEF:	Range 15 - 999 L/min (1 L/min resolution)
FEV_1 FEV_6:	Range 0.15 - 9.99 Litre(0.01 Litre resolution)
Accuracy:	PEF: ±5% or 20 L/min (whichever is greater)
	FEV_1: ±3.5% or 0.1 Litre (whichever is greater)
	FEV_6: ±4% or 0.1 Litre (whichever is greater)
Sensor:	Pressure/flow sensor technology (patented)
Non-volatile Memory:	96 patient test scores
Colour zone:	3 colour zone (green, yellow, red)
Reference values:	User settable
Quality factor:	Warning & indicator for cough or abnormal blow
Communication:	Bi-directional IR port (RS232 format)
Dimensions-Weight:	75x35x20 mm - 35 g

- **33431 POCKET PEAK - standard 60-800 l/min - cream**
- **33433 POCKET PEAK - low 50-400 l/min - yellow**

The Pocketpeak Peak Flow Meter is designed to provide simple and reliable home asthma management.
Lightweight and easy to use, it provides accurate and reliable measurements time and time again.
It is easy to clean and features a universal mouthpiece.
The EU/ATS Scale Pocket peaks will not only comply with the new European Standards but also with ATS (American Thoracic Society) Standards.
Standards range pocket peak will cover 60-800 litres/min, low range will cover 50/400 litres/min.
Package includes multilingual directions for use and peak flow diary, all packed in a cardboard box. Made in USA.
Size 86 x 81 x 30 mm.
Weight 45 g. Standards: EN 13826:2003

- **33432 UNIVERSAL MOUTHPIECES - re-usable**

In plastic, sterilizable, suitable both for adults and children.

- **33410 DISPOSABLE MOUTHPIECES - box of 500**

LUNG EXERCISE DEVICE

- **33442 RESPIPROGRAM**

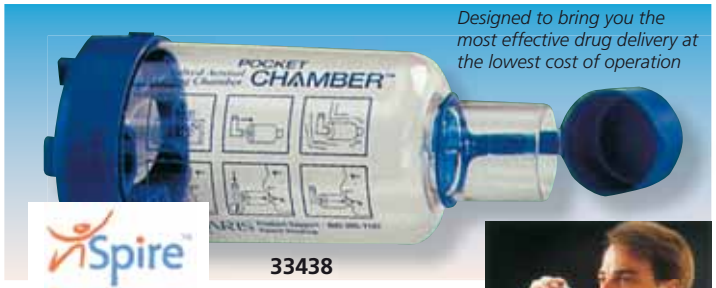
Device to exercise the respiration through inspiration.
The respiratory-exerciser Respiprogram helps the patient to recover the normal respiration after a chest or abdominal surgery. The device is composed of: 1 base, 3 small balls different in dimension and colours, 1 transparent central part, divided into 3 rooms, 1 tube and mouthpiece. Each unit packed in single box. Made in Italy. User manual: English, Italian.

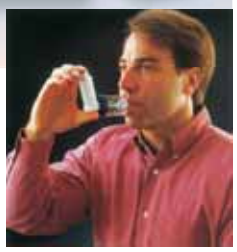
- **33445 TRI-BALL® - respiratory exerciser**

The respiratory-exerciser Tri-Ball® helps the patient to recover the normal respiration after a chest or abdominal surgery.
User manual in English, French, German, Italian, Spanish.

33445

AEROSOL HOLDING CHAMBER





- **33438 POCKET CHAMBER**

Now you can manage your asthma conveniently and effectively with a truly pocket-sized device, proven as effective as MDI chambers nearly twice its size.
The Pocket Chamber delivers a high concentration of respirable aerosol, to help provide relief from asthma symptoms while capturing large particles and reducing unwanted side-effects.
- Whistle alerts patients if inspiratory rate is exceeded
- Effective, affordable alternative to expensive aerosol delivery
- Flexible port accepts virtually any MDI's mouthpiece

TECHNICAL SPECIFICATION

Size: 108 x 47.5 mm	Volume: 110 ml
Mouthpiece: 22mm OD	Weight: 33 g
Materials: All Latex Free Silicone	Warranty: One year
User Manual: in English, Spanish, French, German, Italian, Dutch, Portuguese, Turkish and Greek.	Made in USA

SPIROBANK II - PORTABLE SPIROMETER WITH SPO_2 OPTION

• 33511 SPIROBANK II + WINSPIROPRO SOFTWARE
Spirometer with 6,000 spirometry test memory capacity, with possibility to insert patient name, Bluetooth® connection to HP printer
- Internal temperature sensor for automatic BTPS conversion
- High resolution/high visibility graphic display
- Patient identification by name or ID code
- Automatically records the best 3 trials
- USB cable, carryng case and software included

• 33513 SPIROBANK II + SOFTWARE + OXYMETER
same as above with Oximeter with 1,000 hours (40 days) oximetry recording, for measuring and saving into PC of:
- Short or long term (overnight) SpO_2 and Pulse Rate measurements
- ODI, NOD, T90%, T89%; T88% and T87% calculation
- Sleep apnea detection with desaturation events recording
- Walk Test (6MWT) with SpO_2 and Pulse Rate analysis
- 24 hours holter test
- SpO_2 range: 0-99%, Pulse Rate range: 30-254 BPM

• 33525 ANTIBACTERIAL FILTER - box of 50 disposable
• 33507 DISPOSABLE TURBINE - box of 100

Winspiropro software functions:
- On-line PC connection with icon interface
- Real time Flow/Volume and Volume/time curves
- Bronchial challenge with FEV1 dose-response
- Paediatric incentive animations
- Integration with EPR systems
- Lung age estimation
- Data and graphs export also via E-mail

FDA Approved

PC connection via USB or RS232

128x64 pixel display

Weight 180 g
Size 60x145x30 mm

33513

CE 0476

PC system requirements: Windows 2000, ME, XP, Seven, Vista

TECHNICAL SPECIFICATIONS

Measured parameters: FVC, FEV1, FEV1/FVC%, FEV6, FEV1/FEV6%, FEV3, FEV3/FVC%, PEF, FEF25%, FEF50%, FEF75%, FEF25-75%, FET, Vext, FIVC, FIV1, FIV1/FIVC%, PIF, *FVC, *FEV1, *PEF, VC, IVC, IC, ERV, FEV1/VC%, VT, VE, Rvf, ti, te, ti/t-tot, VT/ti, MVV (* Best value}	Flow sensor: bi-directional digital turbine Flow range: ± 16 L/s Volume accuracy: ± 3% or 50 mL Flow accuracy: ± 5% or 200 mL/s Dynamic resistance at 12 L/s: <0.5 cmH2O L/s Connectivity and data transmission: USB, Bluetooth®, wireless internal modem for acoustic coupling to telephone (telemedicine applications), Power Supply: 4 x 1.5 V, AAA battery
No calibration required PRE-POST bronchodilator comparison Spirometry interpretation with test quality assurance	

SPIROBANK WITH SOFTWARE

CE 0476

Size: 162x49x32 mm only 180 g including battery

ATS STANDARD

FDA Approved

Graphic display (128x48 pixels) with friendly icons

• 33509 SPIROBANK - single use turbine
(for use with disposable turbine 33507 and 33508)
Complete and rapid pocket spirometer for the General Practitioner to carry out spirometry testing anywhere.
No calibration required, use disposable turbine with mouthpiece.
- Measures the most important spirometric parameters including **FVC, FEV1, FEV1%, PEF, FEF25-75, FET**
- Automatic interpretation with traffic light indication
- Best test selected and saved in memory
- Measured parameters compared to predicted values
- Provided with USB cable and simple software Winspiro-Express for data download and printing only
- Selectable display language (English, Spanish, French, German, Italian)
- SPIROBANK is suppied in a carrying bag with spare mouthpieces.

• 33410 MOUTHPIECES int. Ø 2.8 x ext. Ø 3, h 6.5 cm
• 33507 DISPOSABLE TURBINE - box of 100
• 33412 ADAPTER for PAEDIATRIC MOUTHPIECES
• 33411 PAEDIATRIC MOUTHPIECES

TECHNICAL SPECIFICATION
Power supply: 9V DC PP3 battery
Flow range: + 16 l/s
Flow accuracy: ± 5% or 200 ml/s whichever is greater
Max volume: 10 l - Volume accuracy: ± 3% or 50 ml whichever is greater
Made in Italy

SPIROBANK G WITH SOFTWARE

CE 0476

WITH BLUETOOTH

Graphic display (128x48 pixels) with user friendly icons

• 33518 SPIROBANK G + WINSPIROPRO software
- Stand alone spirometer with PC online operation
- 6000 spirometry in memory
- High legibility graphic display
- FVC, VC, IVC, MVV, PRE-POST BD
- Advanced spirometry test interpretation
- Lung age estimation
- Direct printer connection via Bluetooth®
- Ready for **Telemedicine** applications
- Internal temperature sensor for automatic BTPS
- Upgradable internal software via internet

Standard package includes USB cable, pouch, noseclip, battery and software.

33518

FDA Approved

TECHNICAL SPECIFICATION
Measured parameters: FVC, FEV1, FEV1/FVC%, FEV3, FEV3/FVC%, FEV6, FEV1/FEV6%, PEF, FEF25%, FEF50%, FEF75%, FEF25-75%, FET, Vext, Lung Age, FIVC, FIV1, FIV1/FIVC%, PIF, VC, IVC, IC, ERV, FEV1/VC%, VT, VE, Rf, ti, te, ti/t-tot, VT/ti, MVV
Temperature sensor: semiconductor (0-45 °C)
Flow sensor: bi-directional digital turbine
Max volume: 10 l
Flow range: ± 16 l/s
Volume accuracy: ± 3% or 50 ml, whichever is greater
Flow accuracy: ± 5% or 200 ml/s, whichever is greater
Dynamic resistance at 12 l/s: <0.5 cm H2O/l/s
Power supply: 9V DC (PP3 battery)
Weight: 180 g (with battery)
Dimensions: 162x49x32 mm
Made in Italy
WinspiroPRO PC system requirements
- Microsoft Windows: Vista, 2000, XP, Me, Seven
- Screen resolution: 1024x768
- Hard disk space: 160 MB

SPIRODOC - SPIROMETER AND OXIMETER

- **33532 SPIRODOC SPIROMETER + SOFTWARE WINSPIRO PRO**
- **33533 SPIRODOC OXIMETER + SOFTWARE WINSPIRO PRO**
- **33534 SPIRODOC SPIROMETER + OXIMETER + SOFTWARE**

Spirodoc a pocket respiratory laboratory.
Spirodoc can be set-up for different intended uses:
- Advanced parameter setting for pulmonologists
- Simplified general practitioner functioning with essential report for screening purposes
- One-key device activation for home-care patient monitoring

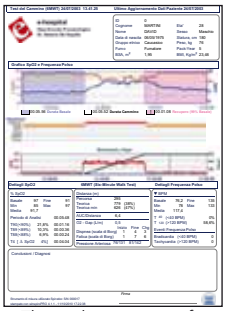
Easy to handle touchscreen display with intuitive icons.
Rechargeable high capacity lithium battery.
Actigraph and step-counter accelerometer to determine patient position during sleep analysis and distance walked estimation for a 6 min. walk test. Massive user-friendly database patient memory with powerful search, visualization and printing functions. Innovative detachable flowmeter ensures a sturdy and durable connection. External connectivity via Bluetooth® or USB cable to PC or via Bluetooth to printer.

Spirometry features:
FVC, VC, IVC, MVV, PRE-POST BD.
Automatically records all trials. Internal temperature sensor for automatic BTPS conversion. Advanced spirometry test interpretation.

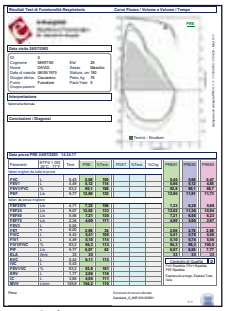
Pulse oximetry features:
Simple and clear SpO_2 and Pulse measurement with pletismographic curve. Sleep disorder detection with events recording. Six minute walk test with desaturation area index. Parameters directly shown on the display (min, ma., mean SpO_2 and Pulse Rate, Δ Index, T90, T89, T88, T5, ODI, NOD, Desaturation Area etc.).
PC requirements: Windows XP, Vista, Seven. Ram 128MB or more.

33534

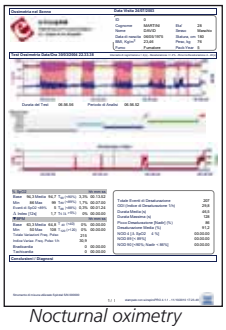
SPIROMETER + OXIMETER IN ONE UNIT



Three phase report of 6 minutes walk test: baseline, walk, recovery



Spirometry report



Nocturnal oximetry report with desaturation analysis

DISPOSABLE TURBINE FOR MIR SPIROMETERS

- **33507 DISPOSABLE TURBINE - box of 100**
- **33508 DISPOSABLE TURBINE WITH INTEGRATED MOUTHPIECE - box of 50**

For single patient use. Low cost and high accuracy. Individually packed to guarantee maximum hygiene.
Easy to replace, no calibration needed. Compatible with GIMA codes: 33509, 33510, 33511, 33518, 33519, 33520, 33521, 33522 and 33530.

33508

MOUTHPIECES FOR MOST SPIROMETERS BRANDS

GIMA MOUTHPIECES

GIMA code	Package	Material	Sizes - cm Ø int x ext x h	To be used with codes	Compatible with
33410	box of 500	paper	2.8x3x6.5 adult	33431, 33433, 33471, 33509-11, 33513, 33518-22, 33530	Micromedical Vitalograph, Mir Ferraris (Koko legend) Cardiette (Pneumos 300)
33897	dispenser of 100				
33411	box of 250	paper	2.0x2.2x6 paediatric	33431, 33433, 33471, 33509-11, 33513, 33518-22, 33530	Micromedical Vitalograph Mir
33412	-	Plastic adapter		33411	-
33506	box of 100	paper	2.6x2.8x6.5	33484, 33485, 33486 33487, 33480	Sibel
33494	box of 100	paper	1.9x2.1x7	33486, 33487	Sibel
33890	dispenser of 100	paper	2.5x2.7x7	-	Fukuda
33892	dispenser of 100	paper	2.8x3.05x7	-	Cosmed (Pony model)
33898	box of 500	paper	2.8x3.05x7	-	Cosmed (Pony model)
33432	-	plastic	1.7x2.1x5 2.7x3x5	33431, 33433	Ferraris

Paper mouthpieces (disposable) and plastic mouthpieces (re-usable) suitable for most brands of spirometers and peak flow, as Cosmed, Fukuda, Ferraris, Micromedical, Mir, Multispiro, Sibel, Vitalograph, ... All paper mouthpieces are singly packed in individual transparent scale pouch

FILTERS AND NOSECLIP

- **33501 BACTERIAL VIRAL FILTER FOR GIMASPIR - reusable****
- **33504 MEMBRANE FOR BACTERIAL FILTER - disposable - box of 50**
- **33474 NOSE CLIP**

33474

33501+33504

** Need adapter for use with Gimaspir 120A, 120B*

SPIROMETRY PAPERS

- **33492 MIR SPIROLAB PAPER - roll 112mm x 25m**

Suitable also for SIBEL DATOSPIR 120 B, C, D, DATOSPIR Touch and GIMASPIR 120 models B, C, D.

- **33893 COSMED PONY PAPER - roll 57mm x 10m - box of 5 rolls**
- **33894 COSMED PONY FX PAPER - roll 112 mm x 13m - box of 5 rolls**
- **33491 THERMAL PAPER - roll 58 mm**

Suitable for SIBEL DATOSPIR 120 A and GIMASPIR 120-A.

SPIROLAB III - DIAGNOSTIC SPIROMETER WITH SPO_2 OPTION

CE 0476

LCD Colour display 240x320 pixel, size 90x120 mm

Printer

Only 1.9 kg for truly portability

33522

Winspiropro software included

Quality spirometry, precise measurement
The proven MIR digital turbine flow sensor requires ***no calibration*** *and complies with ATS 24/26 waveforms.*
Certified by Dr. Crapo at LDS Hospital,Salt Lake City - Utah

• 33521 SPIROLAB III - diagnostic spirometer with high resolution colour display, built-in printer and PC WINSPIROPRO software
• 33522 SPIROLAB III same as 33521 with SpO_2 functions

PEDIATRIC INCENTIVE SYSTEM
HIGH DEFINITION LCD
DATABASE FOR 6,000 TESTS
USB+BLUETOOTH

A really complete spirometry system:
- FVC, VC with breathing pattern plus MVV tests with real time curves
- Over 30 parameters with **automatic interpretation** and test quality control
- PRE/POST bronchial response protocol with F/V loop comparison
- Up to 8 blows curve on one screen
- Internal database for about 6,000 complete tests
- Predicted values with various authors
- Rechargeable battery plus mains power 220 V, 50-60 Hz (110V on request)
- User-friendly keyboard with dedicated function keys plus alphanumeric data entry
- Internal temperature sensor for automatic BTPS conversion
- Free upgradable internal software from web, maintaining previously stored data
- Selectable multilanguage internal software (English, Italian, French, German), possibility to download through internet Spanish, Portuguese, Turkish and other languages

Finger Oximeter (33522 only)
- Short or long term (overnight) SpO_2 and Pulse Rate measurements
- ODI, NOD, T90%, T89%, T88, T87%
- Oximetry during exercise test

• 33520 SPIROLAB II - with printer and software
• 33519 SPIROLAB II - with printer software and 10 disposable turbine. For use with disposable turbine only.
• 33410 ADULT MOUTHPIECES - Ø 3 cm ext - box of 500 pcs.
• 33492 THERMAL PAPER - 112 mm x 25 m
• 33515 SpO_2 PROBE - adult - spare
• 33516 SpO_2 PROBE - paediatric
• 33517 DISPOSABLE SpO_2 PROBE - neonatal - box of 10 pcs.
• 33525 ANTIBACTERIAL FILTER - disposable - box of 50 pcs.
• 33507 DISPOSABLE TURBINE - box of 100 pcs.
• 33508 DISPOSABLE TURBINE WITH INTEGRATED MOUTHPIECE - box of 50

STANDARD ACCESSORIES

Carrying case	Software Winspiro PRO
Battery charger	USB port and cable
1 roll thermal paper	Nose clip

TECHNICAL SPECIFICATIONS 33521-33522

Flow/volume range:	± 16 L/s
Volume accuracy:	±3% or 50 ml
Flow accuracy:	±5% or 200 ml/s
Dynamic resistance:	<0.8 cm H_2 O/l/s
Dimensions:	310 x 205 x 65 mm
Parameters:	FVC, FEV1, FEV1/FVC%, FEV3, FEV3/FVC%, FEV6, FEV1/FEV6%, PEF, FEF25-75%, FEF25%, FEF50%, FEF75%, FET, Vext, *FVC, *FEV1, *PEF, PIF, FIVC, FIV1, FIV1/FIVC%, VC, IVC, ERV, IC, FEV/VC%, VT, VE, Rf, Ti, Te, Ti/T-tot, VT/Ti, MVV *: Best value

PC System requirements: Windows 2000, ME, XP, Seven, Vista.
Made in Italy.

MINISPIR: USB SPIROMETER

• 33530 MINISPIR with software
• 33531 MINISPIR + OXYMETER with software

PC based USB Spirometer (PC not included). Plugs directly into the USB socket of your PC, no need of batteries or other connections.
Provided of internal temperature sensor for automatic BTPS conversion.
Measured parameters: FVC, FEV1, FEV1/FVC%, FEV3, FEV3/FVC%, FEV6, FEV1/FEV6%, PEF, FEF25%, FEF50%, FEF75%, FEF25-75%, FET, Vext, FIVC, FIV1, FIV1/F1VC%, PIF,*FVC,*FEV1, *PEF, VC, IVC, IC, ERV, FEV1/VC%, VT, VE, Rf, ti, te, ti/t-tot, VT/ti, MVV best values

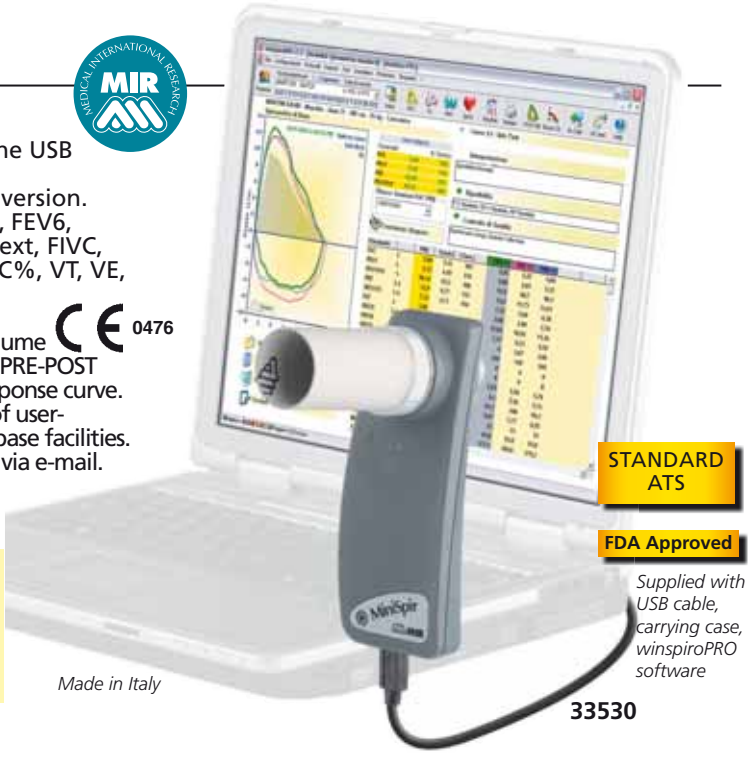
WinspiroPRO PC software:
On line PC connection with simple to use icon-based interface. Flow/Volume and volume/time curve shown in real time on PC. Lung age estimation. PRE-POST bronchodilator comparison. Bronchial challenge test with FEV1dose response curve. Spirometry interpretation with test quality assurance. Includes a series of user-selectable and amusing paediatric incentive animations. Powerful database facilities. Printout with complete spirometry report. Data and graphs export also via e-mail.

CE 0476

• 33410 ADULT MOUTHPIECES - Ø 3 cm ext - box of 500 pcs.
• 33508 DISPOSABLE TURBINE WITH INTEGRATED MOUTHPIECE - box of 50

PC SYSTEM REQUIREMENTS
Microsoft Windows:
2000, ME, XP, Seven, Vista
Screen resolution: 1024x768
Hard disk: 160 MB
USB socket available

TECHNICAL SPECIFICATIONS
Size: 52x128x26 mm
Weight: 70 g
Flow range: ± 16 l/s
Volume accuracy: ± 3% or 50 ml
Flow accuracy: ± 5% or 200 ml/s



Supplied with USB cable, carrying case, winspiroPRO software

Made in Italy

33530

DATOSPIR TOUCH - SPIROMETERS

Spirometry software W20 included (English, Italian, French, Spanish)

- **33476 DATOSPIR-TOUCH - TURBINE TRANSDUCER**
- **33477 DATOSPIR-TOUCH - FLEISCH PNEUMOTACHOMETER**
- **33478 DATOSPIR-TOUCH - DISPOSABLE FLOW TRANSDUCER**

New digital spirometer with colour touchpad display in three operation modes: primary care, occupational or diagnostic.
- Internal printer and USB external printer connection
- Optional Bluetooth or Ethernet connectivity
- QWERTY keyboard
- Internal database for more than 6500 tests
- Rechargeable battery
- Electronic weather station (temperature, humidity and pressure)
- F/V & V/T courves
- 3 best tests selectable and printable
- Pediatric incentive and acoustic signal
- Quality control (QC prompts and QC Grades)
- Autodiagnostic (Miller's Quadrant, Kory and Lyons, NHLEP, ATS)

GIMA code	ACCESSORIES FOR DATOSPIR TOUCH
33470	Bluetooth module (PC & Printer)
33479	Ethernet module
33480	SpO_2 module
33483	MIP-MEP module
33505	Calibration syringe 3 litres

GIMA code	CONSUMABLES AND SPARES	Compatibility 33476	33477	33478
33502	Disposable transducers			•
33506	Adult mouthpieces - Ø 28 ext x 65 mm	•	•	
33494	Pediatric mouthpieces - Ø 21 ext x 50 mm	•	•	
33475	Adaptor for pediatric mouthpieces	•	•	
33492	Thermal paper - 112 mm	•	•	•
33501	Reusable bacterial filter	•	•	
33504	Membrane for bacterial filter	•	•	
33490	Fleisch transducer - (1) - spare		•	
33489	Turbine transducer - (2) - spare	•		

TECHNICAL SPECIFICATIONS

Parameters: FVC, VC, MVV, FEV1, PEF, MEF 25%, MEF 50%, MEF 75%, FEF25-75%, ERV, IRV, TV, IC, MVV, RESP/MIN, FVC (l), FEV0.5 (l), FEV1 (l), FEV3 (l), FEV0.5/FVC (%), FEV1/FVC (%), FEV3/FVC (%), FEV1/VC (%), PEF (l/s), MEF25% (l/s), MEF50% (l/s), MEF75% (l/s), FEF75-85% (l/s), FET25-75% (s), FET100% (s), MEF50%MIF50%, MTT (s), FEV1/FEV0.5, FEV1/PEF (%), MIF50% (l/s), FIVC (l), FIV1 (l), FIV1/FIVC (%), FEV1/FIV1 (%), PIF (l/s), PEF/PIF, Vext. (l), VC (l), TV (l), ERV (l), IRV (l), IC (l), Ti (s), Te (s), Tt (s), Ti/Tt (%), MVV (l/min), Br/Min, MVV ind (l/min), Lung Age, COPD disk
Predicted value: ERS, NHANES III, Knudson, Platino, Morris, SEPAR (Spain), Crapo, Zapletal, Polgar-Weng, Padilla (Mexico), Gutierrez (Chile), Cruz (Mexico), Golshan (Iran).
Measuring range: Flow from 0 to ±16 l/s; Volume from 0 to 10
Flow-Volume accuracy: 5% or 200m/l - 3% or 50 ml whichever greater (ATS, ERS)
Flow resistance: <0.06 kPa/l/s at 14 l/s (ATS, ERS)
Resistance at 14 l/s: Turbine ≤ 0.125 kPa/l/s Fleish ≤ 0.095 kPa/lls
Display: Colour touchpad Display 640x480 pixels / 116.6x87.8 mm
Safety standard: IEC 601.1 (EN60601), UNE 20-613, IEC 601.1.1 (EN601.1.1)
Power supply: 125-240 V, 50/60 Hz Power 30 VA (approx.) Made in Europe.

STANDARD ACCESSORIES

Spirometry software W20
Nose clip
2 rolls of thermal paper
USB cable
Rechargeable battery
25 carton mouth piece (33476, 33477 only)
1 reusable mouth piece
25 disposable transducer (33478 only)
manual: English, Italian, Spanish

GIMASPIR 120 - SPIROMETERS WITH SOFTWARE

- **33485 GIMASPIR 120B - Turbine type - with software**
- **33487 GIMASPIR 120D - Fleisch type - with software**

GIMASPIR 120 spirometers have different types of transducers (Fleisch or Turbine), a wide liquid crystal back-lit screen and an internal or external printer. They can incorporate a module for pulse oximetry measurement (SpO_2). Software allows connection to a computer to perform and store the spirometric tests, or to transfer information.
All the system is controlled by a microprocessor for the acquisition, calculation and display of alphanumeric and graphic data.
Gimaspir comes complete with transducer (Fleisch or Turbine type), 100 disposable mouthpieces, noseclip, 2 rolls of thermal paper, mains power supply, manual and software.

Internal software and manual in English/Italian. On request available in Spanish, French, Portuguese, German

CE 0318
Class IIa

CERT ISO 9001

Spirometry software W20 included (English, Italian, French, Spanish)

Dimensions: 210x297x95 mm
Weight: 1.7 Kg

TECHNICAL SPECIFICATION	GIMASPIR 120 B	D
Type of transducer	TURBINE	FLEISCH
FVC, VC, MVV tests in PRE	•	•
Bronchoconstriction tests		•
Graphic incentive for children	•	•
Internal data base for graphics tests	150 tests	500 tests
Internal printer	112 mm	112 mm
External printer connection	Option	•
Data transfer via Internet with PC of:		
- Patients tests - Check-up data - Software upgrade	•	•
Tests exportation to other systems	•	-
Calibration for quality control or tests	•	•
SpO_2 module, MIP.MEP module	Option	Option
Software under Windows to work with PC	•	•

Measuring range: Flow from 0 to ± 16 l/s; volume from 0 to 10 1
Flow-Volume accuracy: 5% or 200ml/s - 3% or 50 ml whichever greater (ATS, ERS)
Flow resistance: <0.06 kPa/l/s at 14 l/s (ATS, ERS)
Resistance at 14 l/s: Turbine ≤ 0.125 KPa/lls Fleish ≤ 0.095 KPa/lls
Display: Liquid Crystal Display; 320x240 pixels, Area of 120x90 mm
Data input: Alphanumeric membrane keyboard
Safety standards: IEC 601.1 (EN60601.1), UNE 20-613, IEC 601.1.1 (EN601.1.1)
Power supply: 200-240 V 50/60 Hz (110V on demand)
Power 25 VA (aprox.) Made in Europe

GIMA code	ACCESSORIES FOR SPIROMETERS	Compatibility of accessories Gimaspir 120 A	B	C	D
27139	Carrying Bag	•	•	•	•
33489	Turbine transducer - (2) - spare	•	•		
33490	Fleisch transducer - (1) - spare			•	•
33492	Thermal paper - 112 mm		•	•	•
33506	Adult mouthpieces - Ø 28 ext x 65 mm	•	•	•	•
33494	Pediatric mouthpieces - Ø 21 ext x 70 mm	•	•	•	•
33495	Adaptor for pediatric mouthpiece	•	•	**	**
33496	SpO_2 pulse oximetry module*	•	•	•	•
33497	Bronchoconstriction tests*		•	•	
33498	Int. database for 500 tests w. graphics*	•	•	•	
33499	Pmax - Pmax module*	•	•	•	•
33500	Rechargeable battery	•	•		
33505	Calibration syringe 3 litres	•	•	•	•

**If ordered separately, please indicate serial number of equipment, necessary to have access password ** On request*